



## Radical innovation sprint: New tools for well control and sampling (WASP)

Stilling, Torsten; von Solms, Nicolas

*Publication date:*  
2017

*Document Version*  
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

*Citation (APA):*  
Stilling, T., & von Solms, N. (2017). *Radical innovation sprint: New tools for well control and sampling (WASP)*. Abstract from Danish Hydrocarbon Research and Technology Centre Technology Conference 2017, Lyngby, Denmark.

---

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

# Danish Hydrocarbon Research and Technology Centre Technology Conference 2017

## Radical innovation sprint: New tools for well control and sampling (WASP)

*Research Assistant Torsten Stilling<sup>1</sup>, Associate Professor Nicolas von Solms<sup>1</sup>, Associate Professor Philip Loldrup Fosbøl<sup>1</sup>,*

*<sup>1</sup>Center for Energy Resources Engineering, DTU Chemical Engineering, Technical University of Denmark, Søltofts Plads, Building 229, 2800 Kongens Lyngby, Denmark.*

During oil and gas production on an unmanned platform, the offshore production supervisor (OSV) is in control of produced well fluids. Currently it can be difficult to continuously monitor the individual oil:water:gas well ratio. There could be a great potential to shut in wells which has a too high water-cut, but the OSV only has limited tools to pinpoint well stream composition.

**The objective** is to create a tool to reduce the water production and maximize oil production. It is intended for both manned and unmanned platforms. It must give on-line readings of oil/gas/water production rations and it must be able to automatically take consistent high pressure samples on demand, which can be used for understanding of the well conditions. *The device we call WASP* (well analysis + sampler). The information coming from the device is vital to the production. It forms the whole basis for the offshore production control and it feeds into reservoir models etc.

The auto-sampler will address the need for the operator to undertake more in-depth analysis and research of the well fluids. An added value could be that less water is produced which may lead to less corrosion and scaling by applying the WASP.

The objectives are reached by a design study which includes the following tasks: Design and development of 2D and 3D illustrations of the equipment, construction of Standard Operating Procedures for installing and operating the WASP and finally estimating the total prize of constructing the equipment.



AARHUS UNIVERSITY



UNIVERSITY OF  
COPENHAGEN

Technical  
University of  
Denmark



GEUS



AALBORG UNIVERSITY  
DENMARK